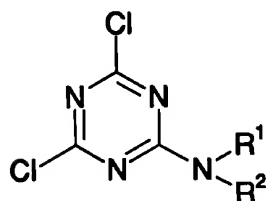
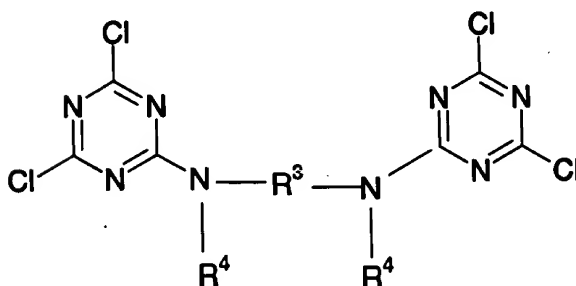


What is Claimed Is:

1. A method for the permanent flameproof finishing of cellulose fibers and articles containing cellulose fibers, comprising treating said cellulose fibers or said articles containing cellulose fibers under alkaline conditions, during which a swelling of the fibers occurs, and then treating the swollen fibers so produced with a cyanuric chloride derivative in an aqueous-alkaline phase, wherein a 4,6-dichloro-1,3,5-triazine-2-yl amine of formula I or II is used as said cyanuric chloride derivative:



(I)



(II),

10

wherein:

- R^1 and R^2 are the same or different and are selected from the group consisting of: H; $(C_1 - C_6)$ alkyl; benzyl; phenyl; ω -amino $(C_2 - C_6)$ alkyl; ω -hydroxy $(C_2 - C_6)$ alkyl; $-(CH_2)_mSO_2-OH$ or $-(CH_2)_m-COOH$, in which m is 1 or 2, as well as their amides; $-(CH_2)_n-P(O)(OR')_2$ in which $n = 1, 2$ or 3 and $R' = H, CH_3$ or C_2H_5 ; o-, m- or p- $C_6H_4-SO_2NH_2$; and o-, m- or p- $C_6H_4-N(CH_3)_3^+$; or R^1 and R^2 together form an ethylene-, trimethylene- or bismethylene imino group;

15

R^3 in formula II is selected from the group consisting of: para- or meta-phenylene; 1,4-, 1,3- or 2,6-naphthylene; $(C_2 - C_6)$ alkylene; $-C_2H_4-NH-C_2H_4-$; $C_2H_4-NH-C_2H_4-NH-C_2H_4-$; $C_2H_4-O-C_2H_4-$; and $C_6H_4-NHCONH-C_6H_4-$;

5 R^4 is selected from the group consisting of: H; $(C_1 - C_3)$ alkyl; aminoethyl; and aminopropyl; or both R^4 groups together form ethylene or propylene.

10 2. The method according to claim 1, wherein said 4,6-dichloro-1,3,5-triazine-2-yl amine is selected from the group consisting of: 2-amino-4,6-dichlorotriazine; 2-aminoethylamino-2,4-dichlorotriazine; 2-(p-benzenesulfonamide-amino)-4,6-dichlorotriazine; a salt, especially a halogenide of 2-(p-trimethylammonium-benzene-amino)-4,6-dichlorotriazine; bis-N,N'-(4,6-dichloro-triazine-2-yl)-p-phenylene diamine; bis-N,N'-(4,6-dichlorotriazine-2-yl)- $(C_2$ to $C_4)$ alkene diamine; and bis-(4,6-dichlorotriazine-2-yl)-aminoethylphosphonate.

15 3. The method according to either claim 1 or 2, characterized in that the cellulose fiber is a cotton or viscose fiber and that it is in the form of a flock, yarn, textile fabric or fleece.

20 4. The method according to either claim 1 or claim 2, wherein the 4,6-dichlorotriazinyl amine compound is used in an amount corresponding to 20 to 80% by wt. relative to the cellulose.

25 5. The method according to either claim 1 or claim 2, characterized in that at least one 4,6-dichlorotriazinyl amine compound is used in an amount corresponding to a nitrogen content of at least 2% by wt., relative to the finished cellulose.

30 6. The method of claim 5, wherein said at least one 4,6-dichlorotriazinyl amine compound is used in an amount of 3 to 7% by wt. relative to the finished cellulose.

- 5

- 10

15



wherein:

R^1 and R^2 are the same or different and are selected from the group consisting of: H; (C_1 to C_6) alkyl; benzyl; phenyl; ω -amino ($C_2 - C_6$) alkyl; ω -hydroxy ($C_2 - C_6$) alkyl; $-(CH_2)_mSO_2-OH$ and $-(CH_2)_m-COOH$, in which m is 1 or 2, as well as their amides; $-(CH_2)_n-P(O)(OR')_2$ with $n = 1, 2$ or 3 and $R' = H, CH_3$ or C_2H_5 ; o-, m- or p- $C_6H_4-SO_2NH_2$; and o-, m- or p- $C_6H_4-N(CH_3)_3^+$; or R^1 and R^2 together an ethylene-, trimethylene- or bismethylene imino group;

R^3 in formula IV is selected from the group consisting of: para- or meta-phenylene; 1,4-, 1,3- or 2,6-naphthylene; ($C_2 - C_6$) alkylene; $-C_2H_4-NH-C_2H_4-$; $C_2H_4-NH-C_2H_4-NH-C_2H_4-$; $C_2H_4-O-C_2H_4-$; and $C_6H_4-NHCONH-C_6H_4-$

R^4 is selected from the group consisting of: H; ($C_1 - C_3$) alkyl; aminoethyl; and aminopropyl; or both R^4 groups together form ethylene or propylene;

R^5 in formulas III and IV is selected from the group consisting of: Cl; OH; Ocell in which cell is an anhydroglucose unit of cellulose; and OR^6 , or NHR^6 in which R^6 standing for a dye group;

and wherein q is the average degree of substitution per glucose unit.

10. The finished cellulose fibers of claim 9, wherein q is 1-3.

11. The finished cellulose fibers of claim 9, wherein said cellulose fibers are in an article selected from the group consisting of: yarn; a fleeces; and a sheet.

12. The finished cellulose fibers of claim 9, wherein said finished cellulose fibers have a nitrogen content of at least 1% by wt.

13. The finished cellulose fibers of claim 12, wherein said finished cellulose fibers have a nitrogen content of 2 to 7% by wt.

14. The finished cellulose fibers of any one of claims 9, 12 or 13, wherein said cellulose fibers additionally contain a bound phosphorus compound.
- 5 15. The finished cellulose fibers of claim 14, characterized in that said fibers have a nitrogen content in the range of 1 to 7 % by wt. and a phosphorus content in the range of 1 to 7% by wt.
- 10 16. The finished cellulose fibers of any one of claims 9, 12, or 13, characterized in that they have an LOI value of at least 22.
- 15 17. The finished cellulose fibers of claim 16, wherein said LOI value is greater than 25.

2025 RELEASE UNDER E.O. 14176